

Management guidance for this area shall come from the Cassia RMP Management Area 10- Jim Sage (Appendix 2-D).

Required Actions 'C' shall be amended to read: "Livestock grazing will not be permitted within RNA/ACEC boundary."

Required Actions 'E' shall be amended to read: "Closed to the sale and free use disposal of mineral materials within the RNA/ACEC boundary."

Required Actions 'F' shall be amended to read: "Off road vehicles are not permitted within the RNA/ACEC boundary."

Required Actions 'G' shall be amended to read: "Recreational activities which do not alter the vegetative condition are permitted within the RNA/ACEC boundary."

Required Actions 'I' shall be amended to read: "Harvest of woodland products within the RNA/ACEC boundary is not permitted."

B. Alternative 2 - No Action

This option allows the current RMP recommendations to guide the management of these areas. This alternative leaves the maintenance of the range-type reference areas to chance.

V. Affected Environment

The proposed areas are used and managed in various ways; each are described below:

A. Oregon-California Trail Junction

1. Physical Information: The area lies in portions of T10S, R27E, Sections 10, 11, 12, 17, 18 and T10S, R26E, Sections 13, and 14. The proposal is to designate 330 feet from trail for approximately seven miles of the trail along public land. This will include approximately 646 acres.
2. Historical/Cultural: The history of the trail is its greatest value. The Raft River crossing signified the parting of the ways for individuals continuing on to California because it represents the beginning of the California Trail. The California Trail was first used in 1843 and saw virtually all of the traffic to California until the Hudspeth's Cutoff was opened in the summer of 1849.

The Oregon Trail was opened by a series of groups beginning in the late 1830's. Nothing of historical importance happened on this segment of the trail; however, it is in good condition and

has seen little use since the wagon traffic ceased soon after the construction of the railroad. This segment of the trail is representative of what the majority of the trail was like for the emigrants.

Approximately a one-half mile segment of the trail which lies on State of Idaho land is excluded from this nomination, but will be included in the nomination to the Oregon Trail Historic District National Register next fiscal year.

B. Granite Pass to Goose Creek Trail

1. Physical Information: The area lies in portions of T16S, R22E, Section 33 to T16S, R22E, Section 30. The two trail segments are almost three miles long and consist of slightly-disturbed ruts. The proposal is to designate 330 feet from the outer edge of the trail for a length of three miles. This will include approximately 258 acres. The trail is approximately 50 feet wide.
2. Historical/Cultural: The Granite Pass segment of the California Trail provided access for wagons between Raft River and Goose Creek as well as the Humboldt River in Nevada. A trail further south across western Utah and Nevada was not possible because of the lack of water. Beginning in 1843, wagon traffic started on the California Trail and Granite Pass even though the emigrants were in Mexican territory for a few miles of this route. In 1848, this area came to the U.S. via treaty after the Mexican/American War.

The descent into Birch Creek was considered to be extremely difficult. Wagon wheels were locked and ropes were used to descend several times. Several trees in the area may still be standing which exhibit rope burns from lowering wagons down the steep slopes. Small portions of the trail in this area have been used for low use-two track roads; however, the basic integrity of the trail has not been damaged. This segment is the best example of the California Trail in an undisturbed condition in Idaho.

C. Goose Creek Mesa

1. Physical information: The boundaries are as follows: from the NE corner of Section 17, the proposed boundary runs due west for a distance of about 0.35 miles until it intersects the rimrock on the western side of the mesa. It then follows the rimrock in a southerly direction toward the center of Section 17 and on around to the southwest, to the eastern boundary of Section 17. It then crosses the narrow arm of the mesa along the section line and follows the rimrock to the northwest, continuing along the rimrock and crosses a draw at the 6,400 foot contour. From there it continues southeast along the rimrock to its

intersection with the eastern boundary of Section 17, which it follows north to the NE corner of the section (Caicco and Wellner, 1983). The area includes 110 acres.

The lowest elevation within the recommended area occurs along the eastern section line of Section 17 at 6,160 feet. The highest elevation is 6,420 feet which is reached along the northern section line of Section 17.

2. Vegetation: The principal feature of the area is the presence of unusual range vegetation types in a relatively undisturbed condition. Two of these are previously undescribed types in which the shrub layer is dominated by black sagebrush (Artemisia nova) and the understory by Nevada bluegrass (Poa nevadensis). The presence or absence of Utah juniper makes up the two types. In the third type, mountain big sagebrush (Artemisia tridentata ssp. vaseyana) and bluebunch wheatgrass (Agropyron spicatum) are the dominants. All of the types are characterized on the site by a rich occurrence of both shrubs and forbs (Caicco and Wellner, 1983).

Botanic systems are as follows: K-055 sagebrush steppe; K-023 juniper-pinyon; SAF-239 pinyon-juniper. Idaho Natural Diversity Scorecard-Basin/Range sage/grass; Basin/Range xeric forest. Other vegetation type-JUOS/ARNO/PONE; ARNO/PONE; ARTRV/AGSP.

3. Wildlife: Mule deer, sage grouse, bobcat, coyote, and mountain lion are known to inhabit the area.
4. Geologic: The geologic value of the site lies in the bedrock of Late Miocene ash-flow tuffs. These are rhyolitic ash-flow tuffs deposited during the Late Miocene (Remember and Bennett, 1979 as reported in Caicco and Wellner, 1983). Mesas with volcanic caprocks are common in the area; Goose Creek Mesa is typical of them, but has a distinctive shape.
5. Soils: Soils vary from moderately deep in swales to areas of scabrock with little soil development (Caicco and Wellner, 1983).

D. City of Rocks

1. Physical Information: The boundaries of the proposed ACEC/RNA are as follows: from the SE corner of section 19, the proposed boundary follows the ridge in a northwesterly direction to the western boundary of Section 19. It then heads due south to a point 0.25 miles beyond the SW corner of Section 19. From here it encloses the NW 1/4 of the NW 1/4 of Section 30 and continues in a straight line to the north until it reaches the 6,600 foot contour line in the SW 1/4 of Section 19. At this point it turns east to the center line of Section 19, which it follows south to the southern boundary of the same section. It then follows the section line east to the SE corner of Section 19 (Caicco and Wellner, 1983). The area is 37 air miles south of Burley, Idaho, at the southern end of the Albion Mountains. The

proposed area encompasses 240 acres of public land. The highest point within the area is 7,689 feet and the lowest point is 6,220 feet in elevation. The area is accessed on foot from the gravel road which connects Almo and Oakley.

2. Vegetation: The area consists of pinyon-juniper forest type. Other woodland species include chokecherry, Great Basin wildrye, curl-leaf mountain mahogany, mountain big sagebrush, and bluebunch wheatgrass. The mountain mahogany form a shrubland in which mountain snowberry, Idaho fescue and bluebunch wheatgrass occur. Also, the vegetation in openings is dominated by mountain big sagebrush, mountain snowberry, and Idaho fescue. Quaking aspen stands occur locally (Caicco and Wellner, 1983).

Vegetation types are: K-055 sagebrush steppe; K-023 juniper-pinyon woodland; SAF-239 pinyon-juniper. Idaho Natural Diversity Scorecard-basin/range sage/grass; basin/range xeric forest. Other vegetation types-ARTRV/FEID; ARTRV/SYOR/FEID; PIMO/JUOS/PRVI; PIMO/JUOS/ELCI; PIMO/JUOS/CELE/ARTRV/AGSP; POTR; CELE/SYOR/FEID/AGSP.

3. Geologic: The area lies within the Basin and Range geomorphic province. The site itself can be divided into two areas on the basis of landform type. The first area is the steep slopes that rise to the northwest-trending ridge that forms the northern boundary of the area. The second area lies in the SW 1/4, SW 1/4 of Section 19 and NW 1/4, NW 1/4 of Section 30; here the rocks have weathered into tors and linear ridges which enclose narrow canyons.

The geology of the Albion Range has been described by Armstrong (1968). The entire area is a gneiss-dome complex with four major domes aligned along a north-south axis. The area is quite complex; however, only two rock units occur within the proposed RNA/ACEC area. Each of the two landform types described above is peculiar to one of the rock units. The ridge which forms the northern boundary of the area is part of the Green Creek complex, a predominantly gneiss unit with bodies of schist, some quartzite, and lenses, pods and sheets of amphibolite. It has been dated at about 2.4 billion years (Precambrian) (Caicco and Wellner, 1983).

4. Wildlife: Mule deer, sage grouse, turkeys, mountain lion, bobcat, golden eagles, rabbits and coyotes are known to inhabit the area. Bal and Wellner, 1979, also list lynx, badgers, porcupines, ground squirrels, sand lizards, ravens, crows, hawks, turkey vultures, magpies, songbirds and bats which roost under some of the rock overhangs.
5. Soils: The soils are generally sandy to gravelly and well-drained. They vary from moderate in depth in some areas to non-existent in other places (Caicco and Wellner, 1983).

E. Jim Sage

1. Physical information: This area lies within Cassia County in parts of Section 10 of T15S, R25E; parts of W 1/2 of Section 11, N 1/2 of Section 15, and NW 1/4 of Section 14, of T15S, R25E. The nominated RNA is 620 acres in size. The area is accessed via jeep trail which extends up Jim Sage Canyon to Jim Sage Spring. The entire area is public land (Caicco and Wellner, 1983).
2. Physical Boundaries: From the end of the road at Jim Sage Spring (Section 14), the boundary follows the ridge on the east to the divide at an elevation of 6,720 feet in the SW 1/4 of Section 11. From this point, the line follows the ridge northerly to peak 7503 along the western section line, and continues in a westerly direction to benchmark 6848 in the NW 1/2 of Section 10. The western boundary of the proposed area is a straight line between this point and a point just inside the NW 1/4 of Section 15 at an elevation of 6,800 feet. The line then runs to benchmark 7005 in the NE 1/4 of Section 15, and follows a poorly defined ridge to connect to the road in Jim Sage Canyon at an elevation of 6,160 feet. The boundary then continues along the eastern side of the road to Jim Sage Spring (Caicco and Wellner, 1983).
3. Hydrologic: Jim Sage Spring is an important undeveloped spring within the Burley District. The spring yields approximately eight tenths (.8) cubic feet per second (cfs).
4. Geologic: Volcanic cliffs and basalt formations are present in this area. The area also contains igneous, tuffs, rhyolite and miocene material (Caicco and Wellner, 1983).
5. Vegetation: The area contains Utah juniper, singleleaf pinyon pine, mountain big sagebrush, bluebunch wheatgrass, and black sagebrush. Habitats include; K-055 sagebrush steppe, K-023 juniper-pinyon woodland, SAF-239 pinyon-juniper. Idaho Natural Diversity Scorecard-Basin/Range xeric forest, Basin/Range sage/grass. Other vegetation types: JUOS/ARTRV/AGSP, JUOS/PIMO/ARTRV/AGSP, ARNO/AGSP (Caicco and Wellner, 1983).
6. Wildlife: Mule deer, sage grouse, chukars, golden eagles, coyotes, mountain lion, bobcats, rabbits, turkeys and rattlesnakes are found in this area.
7. Physiography: The area lies within the Basin and Range geomorphic province. The topography within the proposed area comprises a single major ridge that forms the west valley wall of Jim Sage Canyon. The ridge rises about 500 feet from the abrupt rimrock at the southern edge of the area to its highest point at 7,503 feet. The west-facing slope is moderately steep and drained by several ephemeral streams. The east-facing slope of the ridge is very steep (Caicco and Wellner, 1983).

8. Geology: Most of the rocks exposed in the proposed area are part of the Tertiary lavas of the Jim Sage Mountains, and comprise numerous individual flows of Miocene age. Underlying these rocks are sedimentary strata which include air-fall tuffs, siltstones, sandstones and conglomerates; these older rocks are exposed only locally in the lower part of Jim Sage Canyon (Caicco and Wellner, 1983).
9. Soils: Most of the soils in the area are rocky. Soils of moderate depth are common, although large areas of shallow soils are also present, especially along the ridge (Caicco and Wellner, 1983).

VI. Environmental Consequences

A. Alternative 1 - Preferred Alternative

1. Oregon-California Trail Junction

- a. Grazing: This area is a part of four grazing allotments, Kunau, Basalt Seeding, Raft River, and No Man's Land. These are a part of the entire Highway Unit. Within the Highway Unit, 1,988 acres of rangelands are to be treated to increase livestock forage production by 1,195 AUM's. These treatments are to be at least 330 feet from the edge of the trail. Impacts to grazing are expected to be minimal.
- b. Other: The other programs will not be impacted by designation. Other activities are governed by the Cassia RMP as listed previously. ACEC designation will not alter these actions.

2. Granite Pass to Goose Creek

- a. Grazing: Granite Pass to Goose Creek falls within the Goose Creek Group and Worthington Springs allotments. A portion of the trail is within a proposed rangeland treatment designed to increase the amount of livestock forage available. If designation is adopted for this area, treatments will be excluded within a 660 foot width of the trail. The impact felt by livestock grazing users is expected to be minimal.
- b. Energy: The area is presently open to leasing with time-of-year stipulations for wildlife. ACEC designation will exclude surface occupancy within 330 feet of centerline.

3. Goose Creek Mesa

- a. Grazing: Forage exists in this area; however, the rimrock and absence of water make the area unusable for grazing. Currently, there are no plans for development of water or range improvements. No adverse impacts to the grazing program are expected as a result of this action.

- b. Cultural: RNA/ACEC designation is expected to have a positive affect on the protection of any cultural resources found within the boundaries.
- c. Recreation: No information exists on the amount of recreational use of the mesa. Recreational values include hiking, primitive camping, hunting, and observing wildlife and wildflowers. RNA/ACEC designation is not expected to alter the recreational use of this area.
- d. Wildlife: The proposed area is not within crucial deer winter range or other critical wildlife habitat areas. Designation will have neither a negative or positive affect on the wildlife found in this area.
- e. Other: The Cassia RMP resource management decisions will serve as the guidance for the management of this area as an RNA/ACEC. Minimal impacts to these programs are anticipated.

4. City of Rocks

- a. Wildlife: Cassia RMP wildlife management decisions (Appendix 5) will be met through RNA/ACEC designation of this area. No negative affects are anticipated for wildlife as a result of designation.
- b. Recreation: This area is currently listed as a Special Recreation Area. The RMP calls for the development of facilities such as hiking trails, picnic and camping areas as demand arises. The development of recreational facilities will not be permitted within the RNA/ACEC boundary. However, trail development through the area is expected to have a minimal affect on the resource value that is being protected.
- c. Other Resources:
 - 1) The RMP allows for the area to be open to energy leasing. Energy leasing is subject to the following stipulation: No exploration or drilling activity, or storage facilities allowed within this area (no surface occupancy). The area is presently closed to the sale and free use disposal of minerals. ACEC designation will not alter these decisions.
 - 2) This plan amendment changes the fire suppression category from maximum to limited suppression. Such designation will permit the vegetation to remain in a natural condition.
 - 3) This plan amendment does not allow for the harvest of woodland products within the RNA/ACEC boundary. This will allow the vegetation to remain in its natural condition.

- 4). An effort is being made to consolidate land ownership through exchange, purchase or other means to bring this area under single ownership. In the event that this area should be traded to the State of Idaho, the U.S. National Park Service, or the U.S. Forest Service, the retention of RNA/ACEC designation would be advocated as a condition of an exchange. The RNA/ACEC designation is valid only while the land is under BLM administration.
- 5). The Cassia RMP also calls for the preparation of a City of Rocks Recreation Area Management Plan. Designation will not have a negative impact on such a plan.
- 6). Cultural: No known sites of cultural value have been found within the proposed RNA/ACEC area.
- 7). Grazing: Forage does exist in the lower elevations though use is very limited. RNA/ACEC designation is not expected to impact present grazing systems or values.

5. Jim Sage

- a. Grazing: This portion of Jim Sage Canyon is within the 5003 Jim Sage Allotment. The allotment is in the "Improve" category of management. The present annual six-year average grazing use is 3,663 AUM's, active preference is 3,838 AUM's and suspended preference is 3,840 AUM's. No significant impacts to grazing are expected with RNA/ACEC designation as the cattle rarely move higher than the Jim Sage Spring due to the steepness of ground and lack of water. The Cassia RMP states that range improvement above 6,600 feet will give first consideration to native species. Range improvements will be small, dispersed and designed to fit with the surrounding landscape.
- b. Fire Management: This area is a limited suppression area. Prescribed burning is allowed. Hand tools only are allowed above 6,600 feet in elevation. RNA/ACEC designation is not expected to have a negative affect on fire management.
- c. Recreation: This area is presently within a Special Recreation Management Area. This designation is intended to emphasize primitive recreation above the 6,600 foot elevation level (Natural Area Zone). The designation also is intended to provide trails and trail-heads to accommodate hiking and horseback riding. No trails have been constructed in this area to date. The RNA/ACEC designation is not expected to negatively impact recreational use. No current information exists regarding the frequency of recreational use. The area is used by local hunters in the fall. The proposed area does fall within the Jim Sage Natural Area Zone.

- d. Wildlife: The Cassia RMP will provide for 2,288 AUMs of forage for mule deer and 127 AUMs for antelope. Wildlife improvements above 6,600 feet will be small in size, dispersed, and designed to fit with the surrounding landscape. RNA/ACEC designation is not expected to adversely affect wildlife management in this area.
- e. Energy Resources/Minerals/Lands: The Cassia RMP allows for the leasing of energy resources subject to some stipulations for the protection of wildlife. The proposed area is not within critical deer winter range or sage grouse nesting/brood-rearing areas. Ferruginous hawks, if present, must be protected between March 1 and July 15 by prohibiting activity within the shorter of the following two distances- 2,000 feet or the visible range of active nest sites.
 - 1) No land actions are proposed or scheduled in the area at this time.
 - 2) Mineral leasing and mineral material disposal is managed in a manner that protects the scenic and natural characteristics above 6,600 feet in elevation. Mining activity will be in accordance with 43 CFR 3809 regulations.
- h. Woodland products: This plan amends the harvest of woodland products decision. No woodland products will be harvested within the ACEC boundary. Impacts from this decision are anticipated to be minimal.
- i. Activity plans: The Cassia RMP calls for the development of an Allotment Management plan for the Jim Sage Allotment, which includes the proposed ACEC/RNA area. These plans are constrained by wildlife and watershed sections of the Resource Management Objectives of the RMP. The RNA/ACEC designation would not adversely affect preparation of this plan.

B. Alternative 2 - No Action

Selection of this alternative would require the BLM to continue management of these parcels in their present form. Public benefits from this alternative is much less than those received from alternative number 1. The protection of the various vegetation reference areas would not be as fully assured.

VII. Management Guidelines

A. Oregon-California Trail Junction.

Management plans for this section of trail include monumenting the trail with carsonite signs approximately each one-quarter to one-half mile along the trail.

Vehicle use of the trail will be prohibited.

Interpretive signs will be placed at each end of the trail.

B. Granite Pass to Goose Creek Trail.

Management plans for this section of trail include monumenting the trail with carsonite signs approximately each one-quarter to one-half mile along the trail.

Vehicle use of the trail will be prohibited.

Interpretive signs will be placed at each end of the trail.

C. Goose Creek Mesa

The purpose of RNA/ACEC designation is to preserve the vegetation in its existing, near relict condition. This area is not grazed due to physical boundaries and lack of water. Special management will be activities necessary to maintain the area's present condition.

Incompatible activities include oil and gas exploration and construction of recreational facilities.

D. City of Rocks

This area will require few changes in existing management. The present Special Recreation Area designation in the RMP calls for the development of facilities such as hiking trails, picnic, and camping areas as demand arises.

The development of facilities other than those primitive in nature will not be compatible with the protection of vegetation.

The harvest of woodland products for firewood, posts, and poles will not be allowed within the RNA/ACEC.

E. Jim Sage

Few special management requirements will be made on this area. The largest portion of this area will be kept in as near relict condition as possible. The smaller area around the spring-head will require a fence to relieve heavy livestock use from altering the entire subject area.

A pole enclosure surrounding the spring-heads and approximately 30 acres will be constructed. The enclosure will protect the riparian and associated wetland areas from use. The enclosure will also allow for future development of a pond. Future development of the water, downstream from the enclosure, will be permitted.

VIII. Coordination, Consistency, and Public Participation

A Notice of Intent to Amend the Cassia RMP was published in the Federal Register on Thursday, April 23, 1987. Local newspapers ran advertisements during the last two weeks of April 1987 as well.

IX. List of Preparers

Lynda Boody, Forester
Melanie La Chapelle, Editor

X. Consultants

Kirk Koch, Watershed Specialist
Duane Wilson, Range Conservationist
Terry Costello, Snake River Area Manager
Pete Laudeman, Archaeologist
Sharon LaBrecque, Realty Specialist
Bill Boggs, Recreation Planner
Linda Parsons, Wildlife Biologist

Cassia Resource Management Plan
Research Natural Area/Area of Critical Environmental Concern
Amendment and Environmental Analysis

I. Introduction

A. Purpose and Need:

The Cassia Resource Management Plan (RMP) was completed on January 24, 1985. The plan made no decisions to designate Research Natural Areas (RNAs) or Areas of Critical Environmental Concern (ACECs).

The University of Idaho, acting with the Nature Conservancy, has identified three areas to be designated as RNA/ACEC's. The Burley District Archaeologist has nominated two other areas for ACEC designation. These lands are not identified in the RMP as RNA or ACEC.

A need exists to amend the Cassia RMP to allow for the evaluation and designation of subject lands. These designations are considered to be in the public's interest. Two of the areas, Oregon-California Trail Junction and Granite Pass to Goose Creek, will provide for the protection of a part of America's history. The designation of the other areas will provide rangeland users and managers with information on rangeland conditions with changes in use. These areas are Jim Sage, City of Rocks, and Goose Creek Mesa.

RNA/ACEC designation is not a "withdrawal." Mining and land entries are not prohibited through designation, due to regulations. Such withdrawals are separate actions.

B. Location:

Appendix 1 shows general and specific location. All proposed locations are within the Snake River Resource Area, Burley District.

Specific locations are as follows:

- 1) The Oregon-California Trail Junction Proposed ACEC: T.10S., R.27E., Sections 10, 11, 12, 17, 18, and T.10S., R.26E., Sections 13 and 14. Includes approximately 600 acres;
- 2) Granite Pass to Goose Creek Proposed ACEC: T.16S., R.22E., Section 33 to T.16S., R.22E., Section 30. Includes approximately 200 acres;
- 3) Goose Creek Mesa Proposed RNA/ACEC: T.16S., R.21E., Section 17. Includes approximately 110 acres;
- 4) City of Rocks Proposed RNA/ACEC: R.15S., R.24E., Sections 19 and 30. Includes approximately 240 acres;

- 5) Jim Sage Proposed RNA/ACEC: T.15S., R.25E., S1/2NE1/4, SE1/4NW1/4, E1/2, SE1/4 Section 10; SW1/4NW1/4 W1/2SW1/4, Section 11; W1/2NW1/4 Section 14; and NE1/4, N1/2 NW1/4 Section 15. Approximately 620 acres.

C. Planning Process:

The Cassia RMP was prepared in accordance with BLM manual procedures and involved public participation. The RMP was approved by the Idaho State Director on January 24, 1985, and has been published and distributed to all interested parties.

The RMP made no specific recommendations for the subject lands regarding RNA/ACEC designation. These lands are within management areas which are being managed for multiple use.

Upon concurrence of this plan amendment by the State Director, a public notice summarizing the amendment and probable environmental impacts will be published in the local newspaper. If no protests are filed, the decision will be made part of the Cassia RMP, clearly identified as an amendment and implementation will follow.

D. Conformance:

This Cassia RMP amendment is consistent with Cassia County's Resource and Standards Guide. This amendment meets the "consistency" requirements found in 43 CFR 1610.3-2.

II. Planning Issues and Criteria

A. Planning Issues:

The planning issue here is whether these proposed areas meet the criteria for RNA/ACEC designation and whether they will be so designated.

The Federal Land Policy and Management Act (FLPMA) defines ACECs as "areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards." (Section 103(a).)

43 CFR 8223.0-6 states:

"Areas established as research natural areas shall be of sufficient number and size to adequately provide for scientific study, research, and demonstration purposes."

B. Planning Criteria:

To be considered as an ACEC an area must meet the Relevance and Importance criteria as defined by the CFR. 43 CFR 1610.7-2 defines "Relevance" and "Importance" as follows:

"(1) Relevance. There shall be present a significant historic, cultural, or scenic value; a fish and wildlife resource or other natural system or process; or natural hazard."

"(2) Importance. The above described value, resource, system, process, or hazard shall have substantial significance and values. This generally requires qualities of more than local significance, meaning, distinctiveness, or cause for concern. A natural hazard can be important if it is a significant threat to human life or property."

43 CFR 8223.0-5 defines an RNA as:

"(a) "Research natural area" means an area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: (1) A typical representation of a common plant or animal association; (2) an unusual plant or animal association; (3) a threatened or endangered plant or animal species; (4) a typical representation of common geological, soil, or water features; or (5) outstanding or unusual geologic, soil, or water features."

Three areas are recommended for RNA/ACEC designation. This dual designation is recommended for two reasons. RNA designation is designed to be used for research purposes, three of the proposed areas are to become research sites; therefore, the RNA designation. The addition of the ACEC designation will allow more specific management guidelines to apply to these areas.

All five of these areas have been determined to meet the "relevance" and "importance" requirements as outlined in 43 CFR 1610.7-2.

1) Oregon-California Trail Junction

Relevance

Approximately 7 1/2 miles of slightly-disturbed ruts between the Raft River and Cotterel Mountains constitute the best remaining segment of the Oregon Trail on the Burley District.

Importance

This trail was traveled by almost all emigrants bound for California up to 1849. The preserved ruts in the desert are presently a part of the proposed Oregon-California Trail Historic District National Register nomination.

2) Granite Pass to Goose Creek

Relevance

The California Trail was used by about 200,000 emigrants, mostly after 1848. The number represents almost all of the emigrant

traffic to California because other routes were very expensive. All of the emigrants on the California Trail used the Granite Pass portion of the trail, there were no cutoffs around it. Granite Pass itself is not included in the ACEC. After leaving Granite Pass, the proposed ACEC corridor represents the main route traveled by the emigrants. The rapid influx of people into California after 1848 led to the West becoming a major political force and completed the westward destiny of the nation.

Importance

The California Trail is nationally recognized among historians and the informed, general public as the route that led to the settlement of California by large numbers of Americans and ultimately to statehood. Granite Pass was the only viable route for the early travelers through Middle Mountain. After leaving the pass, most emigrants followed the trail along the proposed ACEC route. The alternate route was through the Utah desert; however, this route consumed too much time, often stranding settlers in fall snowstorms. The Donner party used the Utah desert route, only to be stranded in a snowstorm on Donner Summit, California, in which at least one half of the party perished.

3) Goose Creek Mesa

Relevance

Goose Creek Mesa is representative of several range types which occur in the Basin and Range geomorphic province of southern Idaho. These types include black sagebrush (Artemisia nova)/Nevada bluegrass (Poa nevadensis) and mountain big sagebrush (Artemisia tridentata ssp vaseyana)/bluebunch wheatgrass (Agropyron spicatum).

Importance

The vegetation in this area shows little sign of grazing and is in good ecological condition. Lack of water and the existence of rimrock make this area unusable for grazing. The University of Idaho and the Nature Conservancy have nominated this area for use as a range habitat reference site.

4) Jim Sage

Relevance

This area contains one of the most northern populations of single leaf pinyon pine (Pinus monophylla) in a pinyon pine-Utah juniper (Juniperus osteosperma) forest type. The area also consists of Basin and Range vegetative habitat types including mountain big sagebrush (Artemisia tridentata ssp vaseyana), Idaho fescue (Festuca idahoensis), Great basin wildrye (Elymus cineris), bluebunch wheatgrass (Agropyron spicatum), and chokecherry (Prunus virginiana).

Importance

This area was nominated by the University of Idaho and the Nature Conservancy to serve as a range and woodland reference site. Due to its steep terrain, this area is generally not utilized for grazing.

5. City of Rocks

Relevance

This area contains one of the most northern populations of single leaf pinyon pine (Pinus monophylla) in a pinyon pine-Utah juniper (Juniperus osteosperma) forest type. The area also consists of Basin and Range vegetative habitat types including mountain big sagebrush (Artemisia tridentata ssp vaseyana), Idaho fescue (Festuca idahoensis), Great basin wildrye (Elymus cineris), blue-bunch wheatgrass (Agropyron spicatum), and chokecherry (Prunus virginiana).

Importance

This area was nominated by the University of Idaho and the Nature Conservancy to serve as a range and woodland reference site. Due to its steep terrain, this area is generally not utilized for grazing.

III. Analysis and Justification

Oregon-California Trail Junction

It is recommended that a corridor 660 feet wide along seven miles of the Oregon Trail (excluding state and private land) be designated as an ACEC. Designation will bring more attention to the historical nature of the area and permit protection of the site through an aggressive sign program and public awareness.

Approximately 7 1/2 miles of slightly-disturbed ruts between the Raft River and Cotterel Mountains constitute the best remaining segment of the Oregon Trail on the Burley District. This trail also includes a portion of the junction of the Oregon-California Trail. This trail was traveled by almost all emigrants bound for Oregon. After the opening of the Hudspeth's Cutoff, traffic along the Oregon-California Trail was greatly reduced. For Oregon bound emigrants, this section of trail represented just another river crossing. The preserved ruts in the desert are presently a part of the proposed Oregon-California Trail Historic District National Register nomination.

The Idaho Chapter of the Oregon-California Trails Association has requested that the Burley District "adopt" segments of historic trails, on public land, within its boundaries. The purpose of the adoption is to research the trail's history and document ownership.

ACEC designation is consistent with existing management goals as written in the Cassia RMP Management Area 12A (Appendix B-1). ACEC designation will give priority to this area.

Granite Pass to Goose Creek

It is recommended that a corridor 660 feet wide along 2 1/2 miles of the California Trail segment called Granite Pass to Goose Creek (excluding private land) be designated an ACEC. Designation will attract attention to the historical significance of the area and permit protection of the site through an aggressive sign program and public awareness.

The California Trail segment between Granite Pass and Birch Creek contains some undisturbed remains of the trail and evokes a historical feeling for the trail and the people who crossed it. Granite Pass provided access for wagons from Raft River to Goose Creek, and on to the Humboldt River in northern Nevada.

The Granite Pass segment of the California Trail provided access for wagons between Raft River and Goose Creek as well as the Humboldt River in Nevada. A trail further south across western Utah and Nevada was not possible because of the lack of water. Beginning in 1843, wagon traffic started on the California Trail and Granite Pass was used from the start even though the emigrants were in Mexican territory for a few miles of this route. In 1848, this area came to the U.S. via treaty after the Mexican/American War.

The descent into Birch Creek was considered to be extremely difficult. Wagon wheels were locked and ropes were used to descend several times. Several trees in the area may still be standing which exhibit rope burns from lowering wagons down the steep slopes. Small portions of the trail in this area have been used for low use-two track roads; however, the basic integrity of the trail has not been damaged. This segment is the last remaining portion of the California Trail in Idaho that does not have any major, modern intrusions.

Designation will call attention to this area and provide additional funds for the purpose of supporting the "adoption" two which the District has agreed. ACEC designation will provide attention to the historical value of the trail that is a part of Idaho and the U.S.A.'s history.

ACEC designation is consistent with existing management goals as written in the Cassia RMP Management Area 4 (Appendix 2-B). ACEC designation will give priority to this area.

Goose Creek Mesa

Goose Creek Mesa was selected to represent examples of several range types that occur in the Basin and Range geomorphic province of southern Idaho. The predominant vegetation

throughout much of the area is a black sage steppe in which Nevada bluegrass is the predominant bunchgrass. Scattered Utah juniper trees occur throughout most of the mesa, but in some areas they occur in sufficient numbers to create a woodland setting. In the woodland situation, black sage and Nevada bluegrass are still the shrub and understory dominants. Mountain big sagebrush and bluebunch wheatgrass occur in swales. All of these types are characterized by an abundance of forbs.

Caicco and Wellner have identified a need for this area to be included in an RNA/ACEC network to provide the range of natural diversity in Idaho. This area shows little sign of grazing and is therefore in a natural state. This area's best use is that of a range reference site. With the RNA/ACEC designation, rangeland managers will be able to reference this site when making rangeland improvements. A reference site is used like a "control" in an experiment. Land, insect, and wildlife treatments can be checked against the reference site. RNA/ACEC designation of this area is necessary for the protection of the integrity of the existing condition as well as to provide a reference point from which to make land management decisions.

The purpose of RNA/ACEC designation is to preserve the vegetation in its existing, near relict condition. This area is not grazed due to physical boundaries and lack of water. Special management will be activities necessary to maintain the area's present condition.

4) City of Rocks

It is proposed that this area be designated as an RNA/ACEC. Designation will afford some protection to the present vegetation as an area for reference study sites.

The special management requirements of this RNA/ACEC plan are for the purpose of protecting an existing resource value; therefore, there is little need for subsequent mitigating measures.

This area also contains undisturbed examples of several range habitat types of the Basin and Range geomorphic province of Southern Idaho. All of the vegetation types are developed on a variety of either igneous or high-grade metamorphic substrates. These situations are needed in an RNA/ACEC network to include the range of natural diversity in Idaho (Wellner and Johnson, 1974 as reported in Caicco and Wellner, 1983).

The purpose and need for this area to be designated as an RNA/ACEC, as stated above, is most importantly for its pinyon pine and range vegetation. The undisturbed condition of the range habitat is needed to provide rangeland managers with reference site. Such a site will be used to compare rangeland treatments with a non-treated areas.

5) Jim Sage

It is proposed that the area be designated as an RNA/ACEC. This designation is consistent with the existing management of the area. Designation of the area will allow for the protection of Jim Sage spring-head. Designation will also provide a source for the study of native grasses and natural wetland processes.

This spring and its associated two point one (2.1) miles of wetland/riparian area is unique to the public lands in this area because of its size and its natural state. The water surfaces from several springs that combine to form a consistent, flowing stream of eight tenths (.8) cubic feet per second (cfs). This supports a two mile long community of diverse, native riparian vegetation before it sinks into the ground. Protection through the ACEC designation combined with physically fencing the spring head will provide for an excellent example of a spring fed riparian community in its natural state.

The proposed area also is home to two types of sagebrush which do not normally occur together, Artemisia nova (black sagebrush) and Artemisia arbuscula (low sagebrush). Black sagebrush is normally restricted to eastern Idaho and occurs on shallow, calcareous soils that are generally derived from limestone. This species is at its extreme northern distribution in Idaho, being much more prevalent in Utah and Nevada (Beetle 1960, as reported in Hironaka and Fosberg 1979). Low sagebrush is usually found on rocky, sterile soils. Further, the two species are generally not found on the same site. However, both of these species of sagebrush are found on the volcanic, rocky soils on Jim Sage.

Additionally, this area was selected to represent undisturbed examples of several range habitat types of the Basin and Range geomorphic province of Southern Idaho. The predominant vegetation throughout much of the areas is a Utah juniper woodland in which various admixtures of singleleaf pinyon pine occurs. The shrub layer in this woodland is dominated by mountain big sagebrush, and the understory by bluebunch wheatgrass. A portion of the area has been burned, creating an excellent fire mosaic pattern in which juniper appears to be re-establishing itself slowly. Together, these situations are needed in an RAN/ACEC network to include the range of natural diversity in Idaho (Caicco and Wellner 1983).

The purpose of including an area of natural vegetation in an RNA/ACEC network is to provide rangeland managers with a reference site for use as a control when making rangeland decisions and to assure future generations unmodified examples of unique and diversified ecotypes. The combination of all the above statements make this area a good choice for RNA/ACEC designation.

Few special management requirements will be made on this area. The largest portion of this area will be kept in as near relict condition as possible. The smaller area around the spring-head will require a fence to relieve heavy livestock use from altering the entire subject area.

The construction of a pole enclosure surrounding the spring-heads and approximately 30 acres will protect the riparian and associated wetland areas from use. The enclosure will also allow for future development of a pond. Future development of the water, downstream from the enclosure, will be permitted.

IV. Alternatives, Including the Proposed Action

A. Alternative 1 - Preferred Alternative.

The preferred alternative is to amend the Cassia RMP to include RNA/ACEC designation for Goose Creek Mesa, City of Rocks, and Jim Sage; ACEC designation for the Oregon-California Trail Junction; and ACEC designation for the Granite Pass to Goose Creek portion of the California Trail.

1) Oregon-California Trail Junction

A corridor 660 feet wide by seven and one-half miles in length, as described in Fig. 2 and 3 Appendix 1, will be designated an ACEC. Management guidance for this area shall come from the Cassia RMP decisions for Management Area 12A (Appendix 2-A).

Lands acquired through Required Actions, 'D', will be managed under this decision as well.

The special management requirements of this ACEC plan are primarily for the purpose of protecting or enhancing the environmental resource; therefore, there is little need for subsequent mitigating measures.

2) Granite Pass to Goose Creek

A corridor 660 feet wide by 2 1/2 miles in length, as described in Fig. 4, Appendix 1, will be designated an ACEC. Management guidance for this area shall come from the Cassia RMP decisions for Management Area 4 (Appendix 2-B).

Required Actions: 'H', will be amended to read: "Activities which alter the natural vegetation will not be permitted. The harvest of woodland products is not permitted."

Special management requirements of this ACEC plan are primarily for the purpose of protecting the resource; therefore, there is little need for subsequent mitigating measures.

3) Goose Creek Mesa

An area 110 acres in size, as described in Fig. 5, Appendix 1, will be designated an RNA/ACEC.

Management of the area will be guided by the Cassia RMP Management Area 3 (Appendix 2-E).

Required Action: 'G', will be amended to read: "Activities which alter the natural vegetation will not be permitted. The harvest of woodland products is not permitted."

Required Action: 'F', will be amended to read: "No harvest of woodland products within the RNA/ACEC."

Special management requirements of this RNA/ACEC plan are primarily for the purpose of protecting the resource; therefore, there is little need for subsequent mitigating measures.

4) City of Rocks

An area 240 acres in size, as described in Fig. 6, Appendix 1, will be designated an RNA/ACEC.

Management of this area shall be guided by the Cassia RMP, Management Area 8 and 8b- City of Rocks (Appendix 2-C).

Required Actions 'B' shall be amended to read: "Limited suppression. Prescribed burning is permitted as a part of vegetation study within the RNA/ACEC boundary."

Required Actions 'C' shall be amended to read: "No grazing of livestock permitted within the boundary of the ACEC."

Required Actions 8b 'B' shall be amended to read: "No recreational facilities shall be constructed within the ACEC boundary."

Required Actions 8b 'E' shall be amended to read: "Closed to the sale and free use disposal of mineral materials within the RNA/ACEC boundary."

Required Action 'H' shall be amended to read: "Harvest of woodland products is not permitted within the boundary of the ACEC."

5) Jim Sage

A 620 acre area, as described in Fig. 7, Appendix 1, will be designated an RNA/ACEC.

A pole enclosure as described in Fig. 7, Appendix 1, will be constructed around the Jim Sage spring-head and surrounding 30 acres of wetlands.